

**510(k) Summary of Safety and Effectiveness in Accordance with SMDA'90**

September 5, 2002

Transonic Systems Inc.  
34 Dutch Mill Rd  
Ithaca, NYTelephone: (607) 257-5300  
Fax: (607) 257-7256

DEC 04 2002

**Contact:** Mark S. Alsberge**Product Name:** Transonic Syringe Warmer**Classification name:** Hemodialysis Access Recirculation Monitoring System  
Gastroenterology and Urology  
Class II, 78MQS  
21 CFR §876.5820**SUBSTANTIAL EQUIVALENCE<sup>1</sup> TO:**

| 510 (k) Number  | Name   | Applicant  |
|---|--|--|
| K980906<br><br>Class I exempt<br><br>872.6100 Anesthetic warmer | HD01-CO Hemodialysis Monitor for Cardiac Output<br><br>Vista Dental Syringe Warmer | Transonic Systems Inc.<br><br>Inter-Med Inc. / Vista Dental Products |

**Device Description:**

In accordance with section 510(k) for the Federal Food, Drug, and Cosmetic Act, Transonic Systems Inc. intends to introduce into interstate commerce the Transonic Syringe Warmer as an accessory to our HD01-CO Hemodialysis Monitor for Cardiac Output (K980906). The HD01-CO Hemodialysis Monitor for Cardiac Output requires the user to make a 30cc injection of ~ body temperature saline into the hemodialysis blood circuit for the CO measurement. The syringe warmer will provide the user a convenient source of the 30cc injection of ~ body temperature saline for this injection.

<sup>1</sup> The term "substantially equivalent" as used herein is intended to be a determination of substantial equivalence from an FDA - regulatory point of view under the Federal Food, Drug, and Cosmetic Act and relates to the fact that the product can be marketed without premarket approval or reclassification. These products may be considered distinct from a patent point of view. The term "substantially equivalent" is not applicable to and does not diminish any patent claims related to this product or the technology used to manufacture the product.

**Material:**

The Transonic Syringe Warmer is made of materials which have been bench tested and demonstrated themselves to be suitable for the intended use of this product. The materials have no patient contact; therefore, no biocompatibility testing was completed.

**Substantial equivalence:**

The Transonic Syringe Warmer is similar in materials and form to the Vista Dental Anesthetic Syringe Warmer currently marketed by Inter-Med Inc. / Vista Dental Products (Class I Exempt, 872.6100 Anesthetic warmer). The Transonic Syringe Warmer introduces a slight modification to the intended use. The Transonic Syringe Warmer will be used as an accessory to our HD01-CO Hemodialysis Monitor for Cardiac Output (K980906). They will be used to warm a 30cc syringe of saline to ~ body temperature for injection into the hemodialysis blood circuit rather than to warm dental anesthetic for injection into the patient. This use difference does not raise any new issues of safety or effectiveness regarding the Transonic Syringe Warmer.

**Safety and Effectiveness:**

All finished products are tested and must meet all required release specifications before distribution. The array of testing required for release includes, but are not limited to; physical testing, visual examination (in process and finished product

The physical testing is defined by Quality Control Test Procedure documents. These tests are established testing procedures that ensure the products performance parameters conform to the product design specifications.

The testing instruction records for each of the individually required procedures are approved, released, distributed and revised in accordance with document control cGMP's.



## DEPARTMENT OF HEALTH &amp; HUMAN SERVICES

Public Health Service

Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

DEC 04 2002

Mr. Mark S. Alsberge  
VP Medical and Regulatory Affairs  
Transonic Systems, Inc.  
34 Dutch Mill Road  
ITHACA NY 14850-9787

Re: K022963  
Trade/Device Name: Transonic Syringe Warmer  
Model SYR-1000  
Regulation Number: 21 CFR §876.5820  
Regulation Name: Hemodialysis system and  
accessories  
Regulatory Class: II  
Product Code: 78 MQS  
Dated: September 5, 2002  
Received: September 6, 2002

Dear Mr. Alsberge:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (sections 531-542 of the Act); 21 CFR 1000-1050.

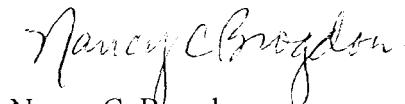
This letter will allow you to begin marketing your device as described in your 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at one of the following numbers, based on the regulation number at the top of this letter:

|                                  |                |
|----------------------------------|----------------|
| 8xx.1xxx                         | (301) 594-4591 |
| 876.2xxx, 3xxx, 4xxx, 5xxx       | (301) 594-4616 |
| 884.2xxx, 3xxx, 4xxx, 5xxx, 6xxx | (301) 594-4616 |
| 892.2xxx, 3xxx, 4xxx, 5xxx       | (301) 594-4654 |
| Other                            | (301) 594-4692 |

Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <http://www.fda.gov/cdrh/dsma/dsmamain.html>.

Sincerely yours,



Nancy C. Brogdon  
Director, Division of Reproductive,  
Abdominal, and Radiological Devices  
Office of Device Evaluation  
Center for Devices and Radiological Health

Enclosure

510(k) Number (if known): K022963

Device Name: Transonic Syringe Warmer (Model SYR1000)

Indications for Use:

The Transonic Syringe Warmer (Model SYR1000) is indicated for use with the Transonic HD01 (HD01<sup>plus</sup> and HD02) systems to make Cardiac output measurements. The Transonic Syringe Warmer (Model SYR1000) is an accessory to our HD01-CO Hemodialysis Monitor for Cardiac Output (K980906) which are currently marketed as the HD01<sup>plus</sup> and HD02 systems. The HD01-CO Hemodialysis Monitor for Cardiac Output (HD01<sup>plus</sup> and HD02 systems) requires the user to make a 30cc injection of approximately body temperature saline into the hemodialysis blood circuit for the CO measurement. The syringe warmer provides the user a convenient source of the 30cc injection of approximately body temperature saline for this injection.

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH, Office of Device Evaluation (ODE)

Prescription Use V

David G. Siperstein  
(Division Sign-Off)

Division of Reproductive, Abdominal,  
and Radiological Devices

510(k) Number K022963

(Optional Format 3-10-98)

(Posted July 1, 1998)